

## Enrolment Course Structure

Course Code – SI5

Course Name – Bachelor of Science

First Year	Unit Code	Unit Name	Unit Rules
<b>Semester 1</b>			
	SCBIO1001	Principles of Biology	
	SCCHM1001	Chemistry 1	
	SCCOR1200	Scientific Communication	
		Major	
<b>Semester 2</b>			
	COOPS1001	Professional Identity (Science)	
	SCCOR1300	Scientific Practice	
		Minor	
		Major	
Second Year	Unit Code	Unit Name	Unit Rules
<b>Semester 1</b>			
		Major	
		Minor	
		Elective	
		Elective	
<b>Semester 2</b>			
	COOPS2011	Co-op placement 1	
		Major	
		Minor	

Third Year	Unit Code	Unit Name	Unit Rules
<b>Semester 1</b>			
	COOPS2012	Co-op placement 2	
		Major	
		Major	
<b>Semester 2</b>			
		Major	
		Major	
		Minor / Elective	
		Elective	

## Bachelor of Science Major and Minor Sequences

### BIOCHEMISTRY

#### Major

SCBCH2001 Biochemistry  
 SCBCH2002 Nutrition and Metabolism  
 SCBCH3010 Advanced Bioanalytical Techniques  
 SCBIO1001 Principles of Biology  
 SCCHM1002 Chemistry 2  
 SCCHM3001 Medicinal Chemistry  
 SCMOL2001 Biotechnology Laboratory Techniques  
 SCMOL3001 Molecular Cell Biology

#### Minor

SCBIO1001 Principles of Biology  
 SCCHM1002 Chemistry 2

Two of:

- SCBCH2001 Biochemistry
- SCBCH2002 Nutrition and Metabolism
- SCMOL2001 Biotechnology Laboratory Techniques

### BIOLOGICAL SCIENCE

#### Major

SCBIO1001 Principles of Biology  
 SCCHM1002 Chemistry 2

Three (pairs) of:

- SCMED2010 Pathophysiology 1 **and** SCMED3034 Histopathology and Haematology

- SCMOL2010 Mammalian Genetics **and** SCMOL3001 Molecular Cell Biology
- SCMIC2001 General Microbiology **and** SCMIC3003 Clinical Microbiology or SCMIC3002 Food Microbiology
- SCBCH2002 Nutrition and Metabolism **and** SCMED3010 Pharmacology and Toxicology
- SCVET2001 Animal Management and Disease **and** SCVET3001 Case Studies in Animal Management
- SCENV2100 Australian Fauna **and** SCENV2101 Australian Flora

#### Minor

SCBIO1001 Principles of Biology

SCCHM1002 Chemistry 2

One (pair) of:

- SCMED2010 Pathophysiology 1 **and** SCMED3034 Histopathology and Haematology
- SCMOL2010 Mammalian Genetics **and** SCMOL3001 Molecular Cell Biology
- SCMIC2001 General Microbiology **and** SCMIC3003 Clinical Microbiology
- SCBCH2002 Nutrition and Metabolism **and** SCMED3010 Pharmacology and Toxicology
- SCVET2001 Animal Management and Disease **and** SCVET3001 Case Studies in Animal Management
- SCENV2100 Australian Fauna **and** SCENV2101 Australian Flora

#### BREWING

##### Double Major

SCBCH2001 Biochemistry

SCBCH2002 Nutrition and Metabolism

SCBCH3010 Advanced Bioanalytical Techniques

SCBRW5081 Brewing Raw Materials

SCBRW5082 The Brewing Process

SCCHM1001 Chemistry 1

SCCHM1002 Chemistry 2

SCCHM2001 Analytical Techniques

SCCHM3003 Food Chemistry

SCFST2023 Food Processing Systems 1

SCMIC2001 General Microbiology

SCMIC3002 Food Microbiology

SCMOL2001 Biotechnology Laboratory Techniques

##### Minor

SCBRW5081 Brewing Raw Materials

SCBRW5082 The Brewing Process

SCCHM1002 Chemistry 2

SCFST2023 Food Processing systems 1 **or** SCMIC2001 General Microbiology

#### CHEMISTRY AND ANALYTICAL SCIENCE

##### Double Major

SCBCH2001 Biochemistry

SCBCH3010 Advanced Bioanalytical Techniques

SCBIO1001 Principles of Biology

SCCHM1001 Chemistry 1

SCCHM1002 Chemistry 2

SCCHM2001 Analytical Techniques

SCCHM2002 Environmental Chemistry

SCCHM3001 Medicinal Chemistry

SCCHM3003 Food Chemistry

SCCHM3004 Organic Synthesis for Drug Design

SCCOR3001 Research Project

SCMOL2001 Biotechnology Laboratory Techniques

STATS1000 Statistical Methods

STATS2100 Experimental Design and Analysis

Two of:

- SCENV3400 Wetlands and Water Resources
- SCENV3912 Environmental Assessment
- SCMED3010 Pharmacology and Toxicology
- STATS2101 Statistics for Prediction
- SCMIC3002 Food Microbiology

## CHEMISTRY

### Major

SCBCH2001 Biochemistry

SCCHM1001 Chemistry 1

SCCHM1002 Chemistry 2

SCCHM2001 Analytical Techniques

SCCHM2002 Environmental Chemistry

Three of:

- SCBCH3010 Advanced Bioanalytical Techniques
- SCCHM3001 Medicinal Chemistry
- SCCHM3003 Food Chemistry
- SCCHM3004 Organic Synthesis for Drug Design

### Minor

SCCHM1001 Chemistry 1

SCCHM1002 Chemistry 2

Two of:

- SCBCH2001 Biochemistry
- SCCHM2001 Analytical Techniques
- SCCHM2002 Environmental Chemistry

## ECOLOGY

### Major

SCENV1001 Environmental Studies

SCENV1002 Biodiversity Conservation

SCENV2100 Australian Fauna **or** SCENV2101 Australian Flora

SCENV2200 Population and Community Ecology

SCENV2500 FIELD-BASED INVESTIGATION

SCENV3110 Fire Ecology: Burning Issues for Science and Management

SCENV3204 Arid Zone: Ecology, Management and Challenges

SCENV3802 Wildlife and Ecosystem Conservation

### Minor

SCENV1001 Environmental Studies  
 SCENV1002 Biodiversity Conservation  
 SCENV2200 Population and Community Ecology  
 SCENV2100 Australian Fauna **or** SCENV2101 Australian Flora

### **ENVIRONMENTAL RESTORATION**

#### **Major**

SCCHM2002 Environmental Chemistry **or** SCENV2100 Australian Fauna  
 SCENV2101 Australian Flora  
 SCENV1001 Environmental Studies  
 SCENV2804 Invasive Species: Ecology, Management and Challenges  
 SCENV3120 Landscape Restoration and Mine Site Rehabilitation  
 SCENV3400 Wetlands and Water Resources **or** SCENV3500 Climate and Environmental Issues in a Changing World  
 SCENV3912 Environmental Assessment  
 SCSUS1500 Sustainable Earth

#### **Minor**

SCENV1001 Environmental Studies  
 SCENV2804 Invasive Species: Ecology, Management and Challenges  
 SCENV3120 Landscape Restoration and Mine Site Rehabilitation  
 SCSUS1500 Sustainable Earth

### **FOOD SCIENCE**

#### **Major**

SCBCH1001 Introduction to Nutrition  
 SCBCH2002 Nutrition and Metabolism  
 SCCHM1002 Chemistry 2  
 SCCHM2001 Analytical Techniques  
 SCCHM3003 Food Chemistry  
 SCFST2023 Food Processing Systems 1  
 SCFST3026 Product and Process Development  
 SCMIC3002 Food Microbiology

#### **Minor**

SCBCH1001 Introduction to Nutrition  
 SCCHM1002 Chemistry 2  
 SCFST2023 Food Processing Systems 1  
 SCFST3026 Product and Process Development

### **GEOSCIENCE**

#### **Double major in Geoscience**

SCCHM1001 Chemistry 1  
 SCCHM2002 Environmental Chemistry  
 SCENV2600 Geographic Information Systems  
 SCENV3120 Landscape Restoration and Mine Site Rehabilitation  
 SCENV3500 Climate and Environmental Issues in a Changing World  
 SCGEO1103 Planet Earth

SCGEO1104 Landscape Evolution  
 SCGEO2103 Structural Geology  
 SCGEO2106 Hydrology  
 SCGEO2107 Fieldwork Principles and Practice  
 SCGEO2112 Sedimentology and Stratigraphy  
 SCGEO3102 Petrology  
 SCGEO3104 Fieldwork  
 SCGEO3115 Geochemical and Geophysical Techniques  
 SCGEO3116 Economic Geology

**Major**

SCGEO1103 Planet Earth  
 SCGEO1104 Landscape Evolution  
 SCGEO2103 Structural Geology  
 SCGEO2107 Fieldwork Principles and Practice  
 SCGEO2112 Sedimentology and Stratigraphy  
 SCGEO3102 Petrology  
 SCGEO3115 Geochemical and Geophysical Techniques  
 SCGEO3116 Economic Geology

**Minor**

SCGEO1103 Planet Earth  
 SCGEO1104 Landscape Evolution  
 SCGEO2103 Structural Geology  
 SCGEO2112 Sedimentology and Stratigraphy

**INFORMATION TECHNOLOGY**

**Minor**

ITECH1500 Digital Literacy  
 ITECH1503 Data and Information Systems  
 ITECH2003 Web Design  
 ITECH2004 Data Modelling

**LABORATORY BIOSCIENCE**

**Major**

SCBCH3010 Advanced Bioanalytical Techniques  
 SCBIO1001 Principles of Biology  
 SCCHM1002 Chemistry 2  
 SCCHM2001 Analytical Techniques  
 SCCHM3001 Medicinal Chemistry  
 SCMIC2001 General Microbiology  
 SCMIC3003 Clinical Microbiology  
 SCMOL2001 Biotechnology Laboratory Techniques  
 SCBCH3010 Advanced Bioanalytical Techniques

**Minor**

SCBIO1001 Principles of Biology  
 SCCHM1002 Chemistry 2

---

 SCCHM2001 Analytical Techniques
 

---

 SCMOL2001 Biotechnology Laboratory Techniques
 

---

**MATHEMATICS**
**Minor (Calculus stream) \*required for VIT registration for VCE teaching**

 MATHS1100 Applied Mathematics 1
 

---

 MATHS2100 Applied Mathematics 2
 

---

 MATHS3100 Applied Mathematics 3
 

---

 STATS1000 Statistical Methods
 

---

**Minor (Non-calculus stream)**

 MATHS1100 Applied Mathematics 1
 

---

 STATS1000 Statistical Methods
 

---

 Two of:
 

---

- MATHS2003 Profit, Loss and Gambling (Intermediate Level)
  - MATHS2009 Space, Shape and Design (Intermediate Level)
  - MATHS2012 Graphs, Digraphs and Networks
- 

**MEDICAL SCIENCE**
**Major**

 SCBCH2001 Biochemistry
 

---

 SCBIO1020 Systems Biology
 

---

 SCCHM1002 Chemistry 2
 

---

 SCMED2010 Pathophysiology 1
 

---

 SCMED3010 Pharmacology and Toxicology
 

---

 SCMED3034 Histopathology and Haematology
 

---

 SCMOL2010 Mammalian Genetics
 

---

 SCMOL3020 Immunology
 

---

**Minor**

 SCBCH2001 Biochemistry **or** SCMED2010 Pathophysiology 1
 

---

 SCBIO1020 Systems Biology
 

---

 SCCHM1002 Chemistry 2
 

---

 SCMOL2010 Mammalian Genetics
 

---

**MICROBIOLOGY**
**Major**

 SCBCH3010 Advanced Bioanalytical Techniques
 

---

 SCBIO1001 Principles of Biology
 

---

 SCCHM1002 Chemistry 2
 

---

 SCMIC2001 General Microbiology
 

---

 SCMIC3002 Food Microbiology
 

---

 SCMIC3003 Clinical Microbiology
 

---

 SCMOL2001 Biotechnology Laboratory Techniques
 

---

 SCMOL3020 Immunology
 

---

**Minor**

 SCBIO1001 Principles of Biology
 

---

SCCHM1001 Chemistry 1

SCMIC2001 General Microbiology

SCMOL2001 Biotechnology Laboratory Techniques

## STATISTICS

### Minor

MATHS1100 Applied Mathematics 1

STATS1000 Statistical Methods

STATS2100 Experimental Design and Analysis

STATS2101 Statistics for Prediction

## VETERINARY BIOSCIENCE

### Double Major

\* courses marked with an asterisk are compulsory for students hoping to complete a Veterinary Science/Veterinary Medicine graduate qualification

SCBCH1001 Introduction to Nutrition **or** SCBCH2001 Biochemistry\*

SCBCH2002 Nutrition and Metabolism\*

SCBIO1020 Systems Biology

SCCHM1002 Chemistry 2\* **or** elective

SCENV1002 Biodiversity Conservation

SCMED2010 Pathophysiology 1

SCMED2011 Pathophysiology 2

SCMED3010 Pharmacology and Toxicology

SCMED3034 Histopathology and Haematology

SCMIC2001 General Microbiology

SCMIC3003 Clinical Microbiology\* **or** SCCOR3001 Research Project

SCMOL2001 Biotechnology Laboratory Techniques

SCMOL3020 Immunology

SCVET2001 Animal Management and Disease

SCVET3001 Case Studies in Animal Management

## WILDLIFE AND ECOSYSTEM CONSERVATION

### Double Major

SCENV1001 Environmental Studies

SCENV1002 Biodiversity Conservation

SCENV2100 Australian Fauna

SCENV2101 Australian Flora

SCENV2200 Population and Community Ecology

SCENV2500 FIELD-BASED INVESTIGATION

SCENV2600 Geographic Information Systems

SCENV2804 Invasive Species: Ecology, Management and Challenges

SCENV3500 Climate and Environmental Issues in a Changing World

SCENV3802 Wildlife and Ecosystem Conservation

SCENV3912 Environmental Assessment

SCSUS1500 Sustainable Earth

Two of:

- SCCHM2002 Environmental Chemistry



- 
- SCCOR3001 Research Project
  - SCENV3110 Fire Ecology: Burning Issues for Science and Management
  - SCENV3120 Landscape Restoration and Mine Site Rehabilitation
  - SCENV3204 Arid Zone: Ecology, Management and Challenges
  - SCENV3400 Wetlands and Water Resources
  - SCEXC2500 International Exchange
- 

### Course Rules

- The Bachelor of Science course requires three years of full-time study or equivalent part-time study.
- Students must complete all core units, plus either:
  - one major sequence (8 x 15cp units) and one minor sequence (4 x 15 cp units), or
  - a double major sequences (14 x 15cp units) available in Brewing and Food Science, Chemistry and Analytical Science, Veterinary Bioscience, Wildlife and Ecosystem Conservation
- A maximum of ten 1000-level units and a minimum of four 3000-level units are required
- The Co-op Placement unit can be completed as 2 x 30cp units at any time in the second and third year of study

### Additional Information

This course structure applies to students commencing from 2025. Students who commenced prior to 2025 should refer to the continuing enrolments page.

*TEQSA have advised that, in accordance with B1.1.3 of [Higher Education Standards Framework \(Threshold Standards\) 2021](#) all Higher Education Providers are required to show their TEQSA Provider number and Provider Category on all relevant public material. ITS have ensured that our website and email signature templates have been amended to ensure compliance and have provided a knowledge article to assist you to update your signatures. Marketing are working to update the brand library and all social media accounts.*

### Glossary

**Semester:** designated teaching period.

**PR:** Pre-requisite, a unit/s that must be completed prior to undertaking another unit.

**CO:** Co-requisite, a unit/s that must be completed simultaneously, or prior to, undertaking another unit.

**EX:** Exclusion, a unit/s that may not be taken.